

Miss Reynolds had the good fortune to make another acquisition in the same district in a species of *Callisia*, which, if not identical, is very near a Cuban Species, the *C. meiantra* of Charles Wright (his No. 3728). The genus is nearly allied to *Tradescantia*.

Two other notes of rare plants may be worth making. Dr. Melli-champ has found *Vincetoxicum scoparium*, Gray, (*Cynoctonium*? Chapman) at Bluffton, South Carolina, and Mr. Shriver has sent specimens of *Adiantum Capillus-Veneris*, L., from the banks of New River, Wythe County, Virginia.—WM. M. CANBY.

ERRATUM.—In Mr. Canby's article on *Baptisia* in the April No. of the GAZETTE, page 131, line 14 from bottom, for "septa" read sutures.

THE YELLOW SNOW—POLLEN GRAINS OR ALGÆ?—A microscopic examination of a portion of the yellow matter, which appeared in the streets of Easton after the snow storm of Monday morning, March 17th, proves it to consist of pollen grains, united at first, but separated when dry, or when again wetted. They correspond in every respect with those of the long-leaved or yellow pines of the Southern States (*Pinus australis*, Michx.). with which they have been carefully compared. This pine, though very abundant in the lowlands of North Carolina, does not extend north into Virginia. The specimen in flower, which furnished the pollen for comparison, was gathered near Wilmington, N. C., in the month of March. Currents of air have, no doubt, brought from that distant region enough of the pollen to powder lightly a considerable district in Northeastern Pennsylvania. Thus far, it has been reported as seen in the Counties of Berks, Lehigh, Carbon and Northampton. I may state also that I have found the water in rain-hogsheads, in Central Pennsylvania, covered with pollen of pine trees, brought by the winds from the neighboring mountains at the season of their flowering, in the month of May.—

THOMAS C. PORTER, *Easton, Pa.*

A VISIT TO THE SHELL-ISLANDS OF FLORIDA, by A. H. Curtiss.—Paper III.—Few who have visited Florida know even the location of the Sister Islands; many who reside within sight of them know not their names. Fishermen occasionally resort to them but they present little of interest to any one but a botanist, and to him a brief exploration is sufficiently satisfactory, especially as an ever sounding voice seems constantly calling him to the sea-shore. The ocean is in plain sight, yet not easily reached, for there intervenes a vast expanse of marsh and the channel through it is extremely tortuous and difficult to navigate. Once in August the writer made a journey of

sixty miles through a similar marsh, finding but five or six landing places on the whole route. The innumerable creeks winding through them form a watery labyrinth through which the tides struggle for a passage. The vegetation is uninteresting and as monotonous as the landscape. Green walls of rigid *Spartina* hem in the vision on every hand, for one can see but a little way in any direction on account of the windings of the channel which may lead toward every point of the compass within the space of ten minutes. When the tide is high there is no spot on which to set foot; as it falls the water comes streaming out from among the grass over the black shining banks, which harbor innumerable crustaceans, and emit a noisome odor. Where the banks are more elevated the wallow of an alligator may sometimes be seen and occasionally the grass gives place to broad mats of Sea-Purslane and Samphire (*Sesuvium Portulacastrum* and *Salicornia fruticosa*). No cheerful sounds greet the ear, the silence is only broken by the harsh cries of marsh fowls, and the ocean's mournful, never ceasing war. Standing up in the boat one looks out over a vast green plain and sees in the distance or near by, islands, light-houses and sails, but the nearest objects may be the most inaccessible, and a day's journey end almost where it began. Indeed, upon reaching Cedar Point, the first landing on the Sister Islands Channel, although we have traveled four or five miles, we are evidently farther from the ocean than when we started. But here we are able to take a new course leading directly to the inlet which separates Talbot from Fort George Island. These are the southernmost of the islands which give rise to the land-locked or inland passage to Florida. North of Talbot is Amelia Island, on which the city of Fernandina is situated. Between Talbot and the mouth of the St. Johns is Ft. George Island, a favorite resort of tourists, who here enjoy the privileges of a fine hotel situated near the sea-beach and among forests of tropical luxuriance. From the observatory one looks down upon the shaggy forest of gnarled oaks and plummy palms, to the west, over far stretching marshes, eastward, over the boundless ocean. On the south the "river of lakes" finishes its marvelous course and pours the waters of Florida into the ocean. At its mouth is the much dreaded "bar" marked by a line of foaming breakers. Across the river are the white sand hills and summer cottages of Mayport, a name associated with the young and promising botanist, Henry D. Keeler, who, alas! now sleeps beneath northern snows. His father, the collector of the port, resides a mile out on the road to St. Augustine. It is a sylvan home embosomed in grand forests of Palmetto,

which open eastward and allow a fine view of the ocean. Great natural beauties and art skillfully directed, have conspired to render this a home worthy its cultured occupants, who have bestowed upon it the Greek name *Thalassa*. The Palmetto is the glory of the "land of flowers," and here, at the very gates of the State one may see it in its perfect development, and study it in its various stages of growth. During the first year the Palmetto puts forth one or two lanceolate, plaited leaves and a multitude of tough, cord-like roots. Having securely established itself in the ground it begins to develop its characteristic fan-shaped leaves, the linear divisions of which diverge from a stout, recurved midrib. For many years the trunk is concealed by the imbricated bases of the huge leaf-stalks; these are provided with sheaths of tough, interwoven brown fibres, which encircle the stem and hold them in position long after the leaves disappear. These old leaf-stalks split at the base as the trunk enlarges, become bleached, and, bristling from the trunks like ivory tusks, present a most singular appearance. After many years the leaf-stalks fall off and leave exposed the brown, cylindrical, somewhat ringed trunks which are sometimes thicker at the top than at the bottom. The small, creamy-white flowers are borne in immense panicles and are succeeded by black berries which have the flavor of dates and are generally gathered by birds before they mature. To the extreme diversity of appearance of the Palmetto, these forests mainly owe their peculiar beauty. Each heightening the effect of the other, the scene borrows grace from the young sprays, grandeur from the towering brown shafts and picturesqueness from the white-pronged trunks of the younger trees, while variety and contrast are added by numerous species of *Magnolia*, *Oak*, *Bay* and other ever-green trees, whose leaning trunks and larger branches support aerial gardens of *Ferns*, *Orchids*, *Tillandsias* and innumerable vines. The transition from these forests to the shrubby thickets bordering the sea is as sudden and surprising as if one were to step from Cuba into Labrador. There, from a black vegetable mold and in a damp atmosphere, every thing grows in tropical luxuriance, here on the storm-swept sands, the *Bay-berry*, *Ilex*, and *Dwarf Oaks* interlock their rigid branches as if in mutual protection against the elements, forming impenetrable copses, reminding one of the growths found on mountains. Between the limits of aborescent growth and the sea is a desolate expanse of white sand, in places smooth as a floor, in others hollowed out into moats which are filled with water, and in others piled up in hillocks or dunes, which appear like earth-works thrown

up against the invading elements. It is a region where the storm king holds undisputed sway, over which fierce winds and tumultuous waves sweep with resistless fury. Following the shore close by the swelling surf, treading the line which bounds an ocean from a continent, the mind is filled with a sense of awe, of unreality, with a fascination which tempts one to wander "on and on forever," forgetful of the past, unmindful of the future, striving to catch the meaning of the ocean's strange murmur, to form a conception of its vastness and of the strange world of life concealed within it. In such musings we indulge for a few moments, then our attention is diverted to the novel and curious objects on the shore. Hundreds of white winged cranes are watching for what the sea may cast up, their moving forms scarcely distinguishable in the distance from white breakers; overhead sea-gulls wheel and scream, while over the beach spirit-crabs hurry sidewise on the tips of their claws, watching us with their baleful eyes and suddenly sink into their holes. Soon, everything brought for the purpose, is filled with shells, coral, Sponges, Echinoderms, Hydroids and Algæ. Then we begin to throw out poor specimens and substitute better and finally send our collections to the boat and turn our attention to the singular maritime plants, which, farther back from the shore are found in considerable variety. They are rigid, succulent, and generally devoid of the ordinary elements of beauty. Still farther from the shore the dreary landscape is brightened by patches of a remarkable grass, a long-awned variety of the *Muhlenbergia capillaris*. Its panicles are of silky softness and of a purplish crimson color. Growing as it does in dense clumps, when seen at a distance it has the appearance of crimson Phloxes. Nearest to the ocean, growing on the dunes, is found another and very different grass, the *Uniola paniculata*, commonly called sea-oats, and much used for ornamental purposes. It is a tough, leathery grass, growing in large clumps, so deeply rooted that it is little affected either by wind or waves. Its heads are borne in graceful panicles on stems from three to five feet high. In almost equally exposed locations is found a very singular Composite, the *Iva imbricata*. The influence of sea-water upon this plant, in producing an extraordinary distension of the cells and thickening of the involucre and leaves is very marked, as much so as in the common maritime *Chenopodiaceæ*, which are here well represented. The *Sesuvium Portulacastrum* grows in less exposed situations in great abundance, likewise the little *Vilfa Virginica*. On the sandy bluffs facing the sea, is found a variety of plants of quite a different character. The *Croton maritimum*



*Phyllanthus Carolinianus*, *Euphorbia polygonifolia*, *Ipomea Pes-capræ*, and *Batatas littoralis*. The last is in the same genus with the sweet potato which it closely resembles in flower and mode of growth. The leaves are thick but rather small, and probably present as great variety of form as any known plant. The daylight fails us ere we finish our search, the moon has risen, and the light-house fires begin to shine through the darkness. A parting stroll along the shore and we will bid it farewell. The sandy waste gleams white in the moonlight with a cold wintry aspect. Listening to the voices which arise from the dark abyss of waters, we hear tales of centuries past, when quaintly built ships from Spain and France sought these shores and upon them landed mailed warriors and adventurous cavaliers. For more than three centuries the armies of foreign nations fought for possession of the "flowery land," while the title of each was disputed by a warlike race of Indians. But they have all passed away, and of all scarcely a relic remains. This bloody epoch in the history of Florida is ended and this favored region, where so much of human life and energy has been wasted, has at last become, as designed by nature, an asylum for suffering humanity. Thousands do now resort to this land of perpetual verdure, seeking, not like De Leon, for a fountain of immortal youth but for renewed health and prolonged life.

ALTERNANTHERA LANUGINOSA IN KANSAS.—Among some collections made by Mr. I. C. Martindale and myself in Central Kansas last summer, I find *Alternanthera lanuginosa* of Torrey in the Mexican Boundary Survey. I am not quite sure of the location, but it was between Fort Harker and Fort Hayes. I have seen this enumerated in no list of Kansas Plants, and I suppose it has not been found anywhere near so far north before.—THOMAS MEEHAN, *Germantown, Pa.*

BENTHAM ON NOMENCLATURE.—In the American Journal of Science and Arts for April, Dr. Gray gives a review of Bentham's "Notes on *Euphorbiaceæ*," in which some remarks on nomenclature are made. They are so timely and interesting that we cannot refrain from publishing them.

The general laws of nomenclature of our day, and the principles on which they rest, are laid down in the code which was reported by Alphonse DeCandolle to the Paris International Convention, in the year 1867, and being approved, was published with a commentary in the autumn of that year, and in an English translation early in the following year. The laws, without the commentary, were printed in